

Appl. No. 10/535,058

Amtd. Dated April 19, 2007

Reply to Office Action of January 19, 2007

Listing of Claims:

1. (currently amended) An x-ray examination apparatus comprising an x-ray source and an x-ray detector,

- the x-ray detector having
 - a photoconductor to derive electric charges from incident x-radiation and
 - read-out elements that derive electrical pixel-signals from the electric charges of the photoconductor and
 - an output circuit to output the electrical pixel-signal from the read-out elements, wherein
 - a central group of the read-out elements is located in a central region of the x-ray detector and
 - a peripheral group of the read-out elements is located in a peripheral region that surrounds the central region,
 - the x-ray examination apparatus further having
 - a selection system to select the central group of read-out elements so as to supply pixel-signals from the central group of read-elements to the output circuit,

wherein the selection system includes an x-ray shielding member that shields the peripheral region of the photoconductor from incident x-radiation.

2. cancelled

3. (previously amended) The x-ray examination apparatus of claim 1, further comprising a collimator between the x-ray detector and the x-ray detector, wherein the collimator has an x-ray absorbing member that is spatially registered with the peripheral region of the photoconductor.

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4. (previously amended) The x-ray examination apparatus of claim 1, wherein the selection system has an encompassing electrode at least substantially surrounding the central region and electrically connected to the read-out elements of the peripheral group.
5. (previously amended) The x-ray examination apparatus of claim 1, wherein collecting electrodes of read-out elements of the peripheral group are smaller sized than collecting electrodes of the read-out elements the central group.
6. (previously amended) The x-ray examination apparatus of claim 1, wherein the selection system electrically isolates the peripheral group of read-out elements from the output circuit.
7. (previously amended) The x-ray examination apparatus of claim 1, wherein the photoconductor is a continuous semiconductor layer or the photoconductor includes a plurality of crystalline semiconductor elements.
8. (previously amended) The x-ray examination apparatus of claim 7, wherein the semiconductor layer or the semiconductor elements contain a photoconducting material from the group of Cadmium Zinc Telluride, Mercury Iodide or Lead Oxide.